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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/590,991DATE: 06/16/2000  
TIME: 19:44:03

Input Set: I590991.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

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1 <110> APPLICANT: Adamou, John  
2 Choi, Gil  
3 <120> TITLE OF INVENTION: Streptococcus Pneumoniae Proteins and Vaccines  
4 <130> FILE REFERENCE: 469201-475  
5 <140> CURRENT APPLICATION NUMBER: US/09/590,991  
6 <141> CURRENT FILING DATE: 2000-06-09  
7 <150> EARLIER APPLICATION NUMBER: U.S. 60/138,453  
8 <151> EARLIER FILING DATE: 1999-06-10  
9 <160> NUMBER OF SEQ ID NOS: 8  
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14 <213> ORGANISM: Artificial Sequence  
15 <220> FEATURE:  
16 <223> OTHER INFORMATION: Description of Artificial Sequence:Forward primer  
17 for PCR amplification of Spl28 genomic sequences  
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20 <210> SEQ ID NO 2  
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24 <220> FEATURE:  
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32 <213> ORGANISM: Artificial Sequence  
33 <220> FEATURE:  
34 <223> OTHER INFORMATION: Description of Artificial Sequence:Forward primer  
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38 <210> SEQ ID NO 4  
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94      20              25              30

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| 96  |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| 97  | Ala | Val | Ile | Lys | Glu | Lys | Glu | Val | Val | Ser | Lys | Asn | Pro | Val | Ile | Asp |
| 98  |     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| 99  | Asn | Asn | Thr | Ser | Asn | Glu | Glu | Ala | Lys | Ile | Lys | Glu | Glu | Asn | Ser | Asn |
| 100 | 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| 101 | Lys | Ser | Gln | Gly | Asp | Tyr | Thr | Asp | Ser | Phe | Val | Asn | Lys | Asn | Thr | Glu |
| 102 |     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| 103 | Asn | Pro | Lys | Lys | Glu | Asp | Lys | Val | Val | Tyr | Ile | Ala | Glu | Phe | Lys | Asp |
| 104 |     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| 105 | Lys | Glu | Ser | Gly | Glu | Lys | Ala | Ile | Lys | Glu | Leu | Ser | Ser | Leu | Lys | Asn |
| 106 |     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| 107 | Thr | Lys | Val | Leu | Tyr | Thr | Tyr | Asp | Arg | Ile | Phe | Asn | Gly | Ser | Ala | Ile |
| 108 |     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| 109 | Glu | Thr | Thr | Pro | Asp | Asn | Leu | Asp | Lys | Ile | Lys | Gln | Ile | Glu | Gly | Ile |
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| 112 |     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
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| 119 | Asp | Asp | Ala | Lys | Ala | Ser | Met | Arg | Phe | Lys | Lys | Glu | Asp | Leu | Lys | Gly |
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 149 Leu Lys Phe Val Tyr Ile Gly Lys Gly Gln Asp Gln Asp Leu Ile Gly  
 150 465 470 475 480  
 151 Leu Asp Leu Arg Gly Lys Ile Ala Val Met Asp Arg Ile Tyr Thr Lys  
 152 485 490 495  
 153 Asp Leu Lys Asn Ala Phe Lys Lys Ala Met Asp Lys Gly Ala Arg Ala  
 154 500 505 510  
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 156 515 520 525  
 157 Glu Leu Pro Ala Met Gly Tyr Glu Ala Asp Glu Gly Thr Lys Ser Gln  
 158 530 535 540  
 159 Val Phe Ser Ile Ser Gly Asp Asp Gly Val Lys Leu Trp Asn Met Ile  
 160 545 550 555 560  
 161 Asn Pro Asp Lys Lys Thr Glu Val Lys Arg Asn Asn Lys Glu Asp Phe  
 162 565 570 575  
 163 Lys Asp Lys Leu Glu Gln Tyr Tyr Pro Ile Asp Met Glu Ser Phe Asn  
 164 580 585 590  
 165 Ser Asn Lys Pro Asn Val Gly Asp Glu Lys Glu Ile Asp Phe Lys Phe  
 166 595 600 605  
 167 Ala Pro Asp Thr Asp Lys Glu Leu Tyr Lys Glu Asp Ile Ile Val Pro  
 168 610 615 620  
 169 Ala Gly Ser Thr Ser Trp Gly Pro Arg Ile Asp Leu Leu Leu Lys Pro  
 170 625 630 635 640  
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175 &lt;210&gt; SEQ ID NO 7

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177 &lt;212&gt; TYPE: DNA

178 &lt;213&gt; ORGANISM: Streptococcus pneumoniae

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 182 gaaaaatcta gttttactat tgatagaaat atttcaacaa ttagagactt tgaaaataaa 180  
 183 gacttaaaga aactcattaa aaagaaattt agagaagttg atgattttac aagtgaaact 240  
 184 ggtaagagaa tggaggaata cgattataaa tacgatgata aaggaaatat aatagcctac 300  
 185 gatgatggga ctgatctaga atatgaaact gagaaacttg acgaaatcaa atcaaaaatt 360  
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 190 aaaaaagctg aaattaaaat tagaatgcct gaaaaaatta aggaaactaa atcagaatat 660  
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 192 aaaccagaca atttaactaa aatggaatct ggtaaaatct attctgattc agaaaaacaa 780  
 193 caatatctgt taaaggataa tatcattcta agaaaaggct atgcactaaa agtgactacc 840  
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219 &lt;210&gt; SEQ ID NO 8

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221 &lt;212&gt; TYPE: PRT

222 &lt;213&gt; ORGANISM: Streptococcus pneumoniae

223 &lt;400&gt; SEQUENCE: 8

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229 35 40 45
230 Arg Asn Ile Ser Thr Ile Arg Asp Phe Glu Asn Lys Asp Leu Lys Lys
231 50 55 60
232 Leu Ile Lys Lys Lys Phe Arg Glu Val Asp Asp Phe Thr Ser Glu Thr
233 65 70 75 80
234 Gly Lys Arg Met Glu Glu Tyr Asp Tyr Lys Tyr Asp Asp Lys Gly Asn
235 85 90 95
236 Ile Ile Ala Tyr Asp Asp Gly Thr Asp Leu Glu Tyr Glu Thr Glu Lys
237 100 105 110
238 Leu Asp Glu Ile Lys Ser Lys Ile Tyr Gly Val Leu Ser Pro Ser Lys
239 115 120 125
240 Asp Gly His Phe Glu Ile Leu Gly Lys Ile Ser Asn Val Ser Lys Asn
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244 Thr Lys Tyr Asp Phe His Ser Lys Thr Met Thr Phe Asp Leu Tyr Ala

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